

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 3, line 22, with the following amended paragraph:

~~BRIEF~~ SUMMARY OF THE INVENTION

Please replace the paragraph beginning at page 4, line 18, with the following amended paragraph:

BRIEF DESCRIPTION OF ~~THE SEVERAL VIEWS OF THE DRAWING~~ DRAWINGS

Please replace the paragraph beginning at page 5, line 19, with the following amended paragraph:

FIG. 1 is a configuration view showing the configuration of a microwave phase shifter according to a first embodiment of this invention. In FIG. 1, reference label 11 denotes a circuit board of the microwave phase shifter. The circuit board 11 is a semi-insulating substrate having a semi-insulating layer 111 formed of a semi-insulating material such as GaAs. On one surface side (front surface side of the substrate) of the semi-insulating layer 111, an active layer 112 is formed in at least a transmission line forming portion, and on the other surface side (rear surface side of the substrate), a first conductive layer 113 of a metal material is formed. The active layer 112 is formed by ion-implanting an impurity into the semi-insulating layer 111, for example.

Please replace the paragraph beginning at page 7, line 8, with the following amended paragraph:

FIG. 2 is a circuit diagram showing the equivalent circuit of the microwave phase shifter with the above configuration for unit length. The transmission line 114 and the first and second grounding conductive layers 113, 115 formed on the front surface and rear

surface of the semi-insulating layer 111 configure a micro-coplanar strip line utilizing the proximity effect. As shown in FIG. 2, the configuration can be expressed by an equivalent circuit configured by inductors and capacitors. In FIG. 2, reference label 1 indicates inductance of the transmission line 114 per unit length, reference label c indicates parasitic capacitance caused between the transmission line 114 and the first and second grounding conductive layers 113, 115, and reference label c1 indicates a capacitance caused by formation of the depletion layer. As is clearly seen from FIG. 2, the capacitance c1 caused by the depletion layer is formed in parallel with the parasitic capacitance c.

Please replace the paragraph beginning at page 10, line 11, with the following amended paragraph:

FIG. 4 is a circuit diagram showing the equivalent circuit of the microwave phase shifter with the above configuration for unit length. In FIG. 4, reference label 1 indicates an inductance of the transmission line 114 per unit length and reference label c indicates parasitic capacitance caused between the transmission line 114 and the first and second grounding conductive layers 113, 115. As is clearly seen from FIG. 4, in the present embodiment, the capacitance caused by the depletion layer in the first embodiment is not present and the value of the parasitic capacitance c itself is changed.